

Giving Roots a Close “Shave”

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One of the programs that I present to groups is called “Dispelling Misperceptions about Trees”. In that program, I talk about several practices that have been common for years that do not have any benefit to



Image 1: Typical Container grown tree with circling roots.

Photo Credit Chuck Lippi

trees and in some cases are harmful to trees. One of those outdated practices is slicing the root ball prior to planting a containerized tree. I can remember “in the old days” I would tell folks that in order to stimulate root growth away from the root ball they should “slice” the root ball vertically in four places as if you were dividing the root ball into fourths. Imagine the embarrassment I felt when I

heard that recent research from the University of Florida revealed that that practice does nothing to aid in establishing a container grown tree.

The reason roots of trees grown in containers need to be manipulated is because tree roots that grow out to the container wall and/or descend down the container wall (Image 1) are defects that are a continual challenge when trying to establish container grown trees. If these defects are not treated, the roots will take much longer to become established in the landscape, and in many cases, not at all. Trees with



Image 2: Un-treated trees can become unstable

root systems that are not established are often seen as not thriving, or not growing well in the new landscape. More importantly, trees where the circling roots have not been corrected, often tip over because the roots have not grown out into the native soil.

So if the practice of root ball slicing is out of date, what should we do when planting a containerized tree to help the tree establish quickly. The answer comes from cutting edge research by Dr. Ed Gilman of the University of Florida, and is called root ball “shaving”. Root ball shaving is cutting away the outer ½ to 1 inch of the root ball periphery where the roots are often

matted, or deflected around or downward by the inside surface of the container. Root ball shaving involves using a sharp digging spade or hand-saw to shave the roots that have circled around the sides of the container. This does two things. It removes the defective roots that cause problems, and it creates an environment where the new roots that sprout from the cut roots immediately grow out into the native soil. After root shaving it is very important to provide proper irrigation to the newly planted tree.



Image 3: “Shaving” a root ball with a hand saw

As a result of this initial research Dr. Gilman also began looking at how containerized trees were being produced in the nursery. He discovered that root defects were being created every time the tree was stepped up to a larger container. Best management practices were created to help container tree nurseries correct these defects as the trees were being grown. This led to the creation of the Florida Association of Certified Container Tree Growers or ACCTG. Their goal is to promote superior production practices for container grown trees through the certification of root and canopy enhancement techniques which provide long-term performance in the landscape”. Soon trees grown under these new Best Management Practices will be available to the consumer. Look for the A.C.C.T.G. tag when purchasing a container grown tree.



Image 4: Shaved root ball

While it may seem harmful to the tree, performing the root shaving technique will help ensure that most circling and diving roots are severed and that the new roots will grow outward, horizontal to soil surface to allow the tree to establish itself in the landscape, as well as, become more stable and less prone to blowing over.